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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,363	10/23/2000	Ronald P. Marcotte	1503-003	9983

7590 09/19/2002

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EXAMINER

MARTIR, LILYBETT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 09/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/694,363

Applicant(s)

MARCOTTE ET AL.

Examiner

Lilybett Martir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 06 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Drawings***

New corrected drawings are required in this application because the thickness of the lines utilized to depict the elements that are comprised in Figures 1-7 is too thin and of poor quality, therefore making it difficult to clearly appreciate and differentiate between the elements displayed in said figures. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-5 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBush (Pat. 5,613,497) in view of Williams (Pat. 5,277,195). DeBush teaches the claimed invention, including:

- A substantially hollow housing comprising a top portion as in element 1, a bottom portion as in element 2, an air inlet as in element 3 and at least one or two air outlet as in elements 10; a flow restriction as in element 19/29 disposed within said housing and in fluid communication with said air inlet,

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said flow restriction being dimensioned to create a back pressure within said housing; a vane assembly as in Figure 5 disposed within said housing, said vane assembly comprising a vane as in element 4, a post as in element 41 to which said vane is fixedly attached, a torsion spring as in element 5 comprising a first end as in element 51 engaged with a groove and a second end 52 engaged with said post; and an indicator as in element 6 indicating a peak flow rate of air based upon movement of said vane; wherein a user blows a stream of air into said air inlet, a first position of said stream of air passes through said inflow restriction and is vented through said at least one air outlet, a second portion of said stream of air contacts said vane and causes said vane to rotate against said torsion spring, and said indicator indicates the peak flow rate of said stream of air based upon said movement of said vane (Col. 4, lines 56-61), as in claims 1 and 8.

- A slot as in element 17 and a scale as in element 18 disposed proximate to said slot, and wherein said indicator 17 is a visual indicator movably disposed within said slot, said visual indicator being dimensioned to be moved by said vane when said vane is rotated by said stream of air to maintain a peak flow position within said slot upon cessation of said stream of air (Col. 4, lines 56-67), as in claims 2 and 9.
- The visual indicator as in element 6 being a unitary plastic indicator (Col. 2, lines 52-55) having a flexible tab for maintaining said peak flow position within

said slot upon cessation of said stream of air (Col. 4, line 67), as in claims 3, and 10.

- The slot as in element 17 forming an arc about an axis as in AC defined by a centerline of said post of said vane assembly, said arc subtending an angle of more than one hundred and eighty degrees as easily noted on Figure 4A, as in claims 4 and 11.
- The at least one air outlet comprising two air outlets as in elements 10 disposed within a flow portion of said housing, said air outlets being dimensioned to allow air to freely exit said housing, and wherein said housing further comprises a back vent as in element 12, as in claims 5 and 12.

But he does not disclose:

- An adjustable hub or a hub attached to said bottom portion of said housing, wherein said adjustable hub is dimensioned to allow said post to be rotated to a predetermined position, and a torsion spring comprising a first end engaged with said adjustable hub and a second end engaged with said post, as in claims 1 and 8.

Williams teaches a similar type of flow meter or spirometer having adjustable means 91 to bias vane 37 attached to the bottom of the housing 3 as shown in Figure 3, said adjustable means inherently allowing the vane shaft 53 to rotate to a predetermined position with a torsion spring as in element 93 comprising a first end engaged with said adjustable hub 97 and a second end engaged with said shaft 53 as noted in Col. 5, lines 30-42 (note that the cap 97 is tightly fitted and therefore it remains

stationary with respect to the chassis 3, therefore allowing the vane to move as selected up to a point dictated by the spring means 93).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the peak flow meter of DeBush using the teachings of the spirometer of Williams by providing said flow meter with an adjustable hub attached to the bottom portion of said housing and being dimensioned to allow said post to be rotated to a predetermined position and the torsion spring being engaged with said adjustable hub and said shaft, for the purpose of providing said flow meter with means to increase and decrease the bias on the vane that are also useful in calibrating, therefore making said flow metering device more accurate, versatile and reliable.

Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBush in view of Williams as applied to claims 1 and 8 above, further in view of Edwards et al. (Pat. 6,126,613). DeBush teaches the claimed invention, except for:

- An air filter assembly attached to said inlet, as in claims 6 and 13.

Edwards et al. teaches a flow meter having a filter as in element 146 that is removable (Col. 7, lines 8-12).

It would have been obvious at the time the invention was made to ordinary skill in the art to modify the peak flow meter of DeBush in view of Williams by further using the teachings of Edwards et al. by providing a filter that is removable for the purpose of protecting the interior of the device from saliva and particles that may enter the meter and adversely affect it while it's being used therefore improving it's reliability.

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Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBush in view of Williams and Edwards et al. as applied to claims 6 and 13 above, and further in view Karbachsch et al. (Pat. 5,422,057). DeBush in view of Edwards et al. teaches the claimed invention, except for:

- An hexagonal filter portion, as in claims 7 and 14.

Karbachsch et al. teaches a filtration module with different shapes, including one with an hexagonal geometrical shape as the one shown in Figure 6.

It would have been obvious at the time the invention was made to ordinary skill in the art to modify the peak flow meter of DeBush as modified in claims 6 and 13 by further using the teachings of Karbachsch et al. by providing it with a filter that features a substantially hexagonal filter portion for the purpose of providing a filtering medium having a specific and known shape to protect the flow meter of DeBush from external contaminants that may alter it's functioning therefore making said device reliable.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments have been fully addressed by the rejection presented above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Fuller can be reached on (703)308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

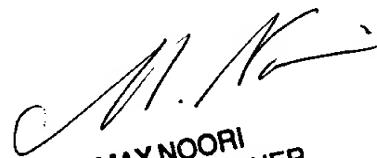
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Lilybett Martir
Examiner
Art Unit 2855



September 16, 2002



MAX NOORI
PRIMARY EXAMINER